

## GREEN LAKE 2020 NEIGHBORHOOD PLAN TRAFFIC ANALYSIS OF SELECTED INTERSECTIONS

PREPARED FOR: A Northwest Collaborative/Green Lake Transportation Committee

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DATE: October 8, 1998

This technical memorandum summarizes traffic analysis and improvement evaluations conducted at four selected intersections at Green Lake. The Transportation Committee selected the intersections for analysis and assessment. The analysis involved determining whether existing conditions warrant protected left turn phasing for northbound and southbound approaches at Wallingford Avenue N. /N. 85th Street, and Aurora Avenue N. /Winona Avenue intersections. An assessment of installation of a roundabout at Ravenna Boulevard/Green Lake Way/Drive, and at Green Lake Way/N. 50th Street/Stone Way intersections was also conducted. Finally, problems along NE 71st Street between 5th Avenue and Woodlawn Avenue were reviewed and suggested improvements are presented. Traffic data and assumptions used in conducting the analysis, and resulting findings at each of the selected intersections are presented below.

### LEFT TURN SIGNAL PHASING ANALYSIS

In order to maintain or enhance safety and traffic flow efficiency at signalized intersections, Seattle Transportation (SEATLAN) has a set of safety and operational warrants that must be met before it would consider the provision of a left turn phase at any signalized intersection. According to SEATLAN Policy No. 40, there must be an existing or projected congestion reduction or safety improvement need as defined below. Typically, other alternatives such as prohibiting the left turn movement (and encourage left turns at a downstream or upstream intersection), retiming the traffic signal, and adding a left turn lane at the intersection would be evaluated first, before considering the installation of a left turn signal phase. The improvement needs that must be justified and the analysis required are described below.

- **Left Turn Capacity** - The left turn capacity of an approach is determined based on opposing volume and number of lanes, considering whether or not a left turn lane exist at the intersection.
- **Congestion Reduction** - If the left-turn demand is greater than 90% of the left turn capacity on one approach, an exclusive left turn phase is probably needed to reduce congestion. If the left-turn demand is less than 70% of the left-turn capacity on one approach, there is probably no left-turn congestion reduction need. Between 70 and 90% further analysis is necessary.
- **Safety Improvement** - If the number of left-turn collisions in a recent 12-month period is five or more, or an average of three or more per year over the current period, there is a safety improvement need. If three or four left-turn collisions occurred in a recent 12-month period, then further analysis is necessary as stated below.
- **Further Analysis** -
  - Delay* - A congestion reduction need may exist if a left-turn delay of 2.0 vehicle-hours or more occurs in a peak hour on the approach. Also, there must be a minimum left-turn volume of 2 per cycle during the peak hour, and the average delay per left-turning vehicle must be at least 35 seconds.
  - Volume* - A congestion reduction need may exist when the product of left turning and opposing volumes plus conflicting pedestrian volume during peak hours exceeds 100, 000 on a four-lane

street or 50,000 on a two-lane street. Also, the left turn volume must be at least 2 per cycle during the peak hour period.

**Pedestrian Volume** – A congestion reduction need may exist when the number of pedestrians in conflict with the left turn exceeds 150 per hour.

A review of traffic data from a permanent count station located "at' Green' Lake Way N., north of N., 57th Street revealed a general annual average week-day traffic growth rate of about 3.5% for northbound traffic, and approximately 4.5% for southbound traffic. There was no apparent trend in the annual peak hour traffic data collected at the permanent count location. The lack of a trend for the historic peak hour volumes, coupled with the somewhat removed location of the permanent count station in relation to the intersections of interest adds complexity to estimating current peak hour traffic volumes for analysis. For that reason, the most recent traffic data collected in October 1995 by SEATRAN was used in performing the analysis. Current turning movement counts for AM and PM" peak periods should be collected at all selected intersections for further analysis, if desired.

### ◆ Wallingford Avenue @ N. 85th Street

A left turn congestion and safety need analysis was conducted at the intersection for both northbound and southbound left turn movements. Backup of the analysis is attached. The following conclusions are made based on results of the analysis.

Northbound left-turn traffic *does not meet* volume or accident warrant, in the AM and PM peak periods  
Southbound left turn traffic *meets* volume or accident warrant, in the AM and PM peak periods.

Normally, opposing left turn movements favor efficient signal timing. Since only the southbound left turn movement warrants a left turn signal phase, a split phase timing plan will have to be implemented for the southbound approach. Support for the "split phase plan however, requires intersection delay analysis to assess the impact of the southbound left turn split phase timing plan on the overall operation of the intersection,

### ◆ Aurora Avenue N. @ Winona Avenue

Currently, left turns are prohibited on the north leg (from southbound to eastbound). There is no left turn pocket on the north leg, but a left turn pocket is provided on the south leg, without a left turn phasing. A left turn and safety need evaluation were performed at the intersection using the most recent data available at SEATRAN. Backup of the traffic and accident analysis is attached. The following conclusions are made based on results of the analysis.

Northbound left-turn traffic *does not meet* volume or accident warrant in the AM and PM peak periods.  
Southbound left turn traffic *does not meet* volume or accident warrant in the AM and PM peak periods.

## ROUNDAABOUT INSTALLATION ANALYSIS

Roundabouts are a relatively new intersection control strategy in the City of Seattle, therefore, SEATRAN does not have any established analysis methodology to assess or quantify impacts and benefits at a roundabout intersection. Generally acknowledged anecdotal benefits of a roundabout include efficient movement of traffic compared to an All Way Stop Controlled or a Traffic Signal Controlled intersection due to the absence of a sequential assignment of traffic and clearance (lost) time. Another benefit exhibited by a roundabout is that left turns are not subordinated to through traffic.

A roundabout is not a standard traffic control device, therefore, approval is required from WSDOT for its installation, even on a City arterial, WSDOT is in the process of developing design standards for roundabout design in Washington State. There are software programs such as "RODEL" model that are

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used to analyze roundabouts, The City of University Place recently installed the first arterial roundabout in Washington State after an extensive national and international research and documentation on its impacts and benefits, and coordination with Washington State Department of Transportation (WSDOT). Consultant has requested information on methodologies used to analyze roundabouts, from City of University Place, Maryland Department of Transportation (DOT), and Florida DOT. SEATRAN and WSDOT staff would be consulted to work with consultant to develop a methodology for performing detailed analysis at proposed roundabout locations after the requested data is received. This extensive effort, however, may be more than the project's available budget would allow. In the meantime, a brief qualitative evaluation of a roundabout installation at the selected intersections is provided below.

### ◆ Ravenna Boulevard @ Green Lake Way/Drive

In spite of the absence of an accepted methodology to quantify the benefits of a roundabout, installing a roundabout at this intersection is feasible and would also be expected to enhance traffic flow due to existing layout and traffic volumes which support an efficient roundabout operation.

### ◆ Green Lake Way @ N. 50th Street / Stone Way

Based on preliminary evaluation with SEATRAN staff, this signalized intersection may not be a good candidate for a roundabout due to existing intersection configuration (intersection legs are not evenly spaced), and high traffic volumes. Further assessment on the feasibility of a roundabout at this location may be necessary after additional information on roundabouts is received.

## OTHER SUGGESTED IMPROVEMENTS

### ◆ 5th Avenue NE @ NE 71st Street

The Vitamilk Plant, a dairy products processing plant, is located at the north side of NE 71st Street between 5th Avenue NE and Woodlawn Avenue North. Most of the Vitamilk trucks access the plant for loading and unloading via westbound on 5th Avenue. Approximately once a week, a double-tanker truck also makes sugar delivery to the plant via NE 71st Street. On street parking is permitted sparingly along the south side of NE 71st Street; whereas on-street parking is prohibited along the north side of the street.

NE 71st Street is one of the main access roadways to I-5 freeway from Green Lake Way. As a result, there is high traffic volume especially during the PM peak period, typically between 3:30 - 6:00 PM. Due to the need for Vitamilk trucks to back in and out of holding areas along both sides of NE 71st Street, stopping vehicles on NE 71st Street to allow for truck turn around almost instantly causes backups along NE 71st Street. The extent of queue backups along NE 71st Street is also exacerbated frequently as traffic southbound on I-5 divert at NE 71st Street Exit. and use NE 71st Street to get to Aurora Avenue N. or use local streets to bypass I-5 freeway congestion to downtown Seattle.

Other traffic related problems within the area include difficulty that trucks encounter in making left turns from southbound on Woodlawn Avenue N. to eastbound on NE 71st Street due to encroachment of westbound traffic into the intersection.

To enhance pedestrian and vehicular safety along NE 71st Street between 5th Avenue NE and Woodlawn Avenue N., either of the following improvements should be considered.

- Convert NE 71st Street from a Two-Way Street to a Westbound One-Way Street

This option is not expected to provide major benefits as it would continue to allow diverted vehicles that do so to avoid southbound I-5 freeway congestion. It is expected, however, to result in a reduction in the

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number of vehicle conflicts, and vehicles that have to wait (queue) due to truck turn round or northbound I-5 freeway ramp congestion. Further analysis is needed to assess the impact of the road-use revision on adjacent streets and area circulation.

- Convert NE 71st Street to a “Truck and Deliveries Only” Access Street

Due to conflicts between Vita milk trucks and general-purpose vehicles along NE 71st Street between Woodlawn Avenue N, and 5th Avenue NE, restricting the roadway to truck and deliveries only use would significantly enhance safety and truck maneuverability. Traffic to and from I-5 freeway would have the option of accessing I-5 freeway from streets located one block to the north and south of NE 71st Street. Further analysis is needed to assess the impact of the road-use revision on adjacent streets and area circulation

## Appendix B Treasured Places Green Lake 2020 • Neighborhood Planning

### TREASURED PLACES

Green Lake is built around a popular treasured place, the Lake which gives this neighborhood its unique form and identity. Other special places also contribute to the neighborhood's essential character. A community without the Lake at its heart is inconceivable. Likewise, a neighborhood without features which impart beauty, personality and livability would be a great loss for both local residents and the city as a whole.

Fortunately, Green Lake's most prominent features, its parks, views and major public buildings, are fairly secure. Smaller, more subtle elements may prove more vulnerable to change which accompanies growth. As a foundation to the neighborhood plan, residents identified buildings, landscapes, streetscapes, destinations and urban design elements they especially value (or dislike), creating the Treasured Places Map found in Appendix B. Such documentation indicates what the plan should especially strive to safeguard, build upon or improve in shaping future community character.

In 1975, citizens of Green Lake documented significant historic and urban design features of their neighborhood through an extensive inventory process. Part of a citywide grant project directed by Historic Seattle Preservation and Development Authority, the result was a folding map entitled Green Lake: An Inventory of Buildings and Urban Design Resources. This Historic Seattle document effectively presents the common architectural themes found in the neighborhood, and identifies architecturally-significant buildings which should be preserved. Also included are views and vistas, significant streetscapes and tree locations. With permission from Historic Seattle, a reformatted version of the original map, text and photos has been included in Appendix B.

This comprehensive 1975 survey assembled much valuable information about Green Lake's physical character. Two decades later, the inventory and map remain substantially accurate. The Green Lake 2020 Treasured Places survey has added to this Historic Seattle document a populist, rather subjective perspective on what elements make the neighborhood special. Measured not by urban design and architectural historical standards but by the observations and sentiments of local residents, five "Treasured Places" categories supplement the original three illustrated on the inventory map. By adding these categories to the Historic Seattle map, a new "Treasured Places" map was created.

The Treasured Places Survey was conducted as a written questionnaire delivered to neighborhood households as part of a late spring 1998 newsletter publicizing Green Lake 2020. Copies also were made available at public workshops, the Town Meeting, Green Lake Public Library and the Community Center. The survey form and results are found in Appendix B, with illustrated examples expanding upon the

original Historic Seattle material. Locations are mapped and listed, so that curious readers can easily find treasured places throughout the neighborhood.

The 1975 categories are Common Building Types, Significant Buildings, and Urban Design Elements. 1998 additions include Treasured Buildings, Treasured Landscapes, Favorite Destinations, Most Disliked Places, and Places which Would Be Missed. Taken together, a picture emerges of citizen-generated favorites and historically-significant features. While overlap among categories is considerable, what Green Lake residents value extends beyond architecture and design to places and elements that specially enrich their daily lives.

The Treasured Places Map suggests several important follow-up activities, including but not limited to:

- Developing new policies designed to preserve buildings and places like those noted on the map.
- Seeking official landmark designation for significant buildings and landscapes.
- Promoting new development sensitive to valued existing characteristics of scale, rhythm, material use.
- Monitoring identified Treasured Places and adding others through time.

Throughout the plan are included goals and initiatives which directly or indirectly support preservation of those places and qualities most treasured by Green Lake's citizens.

At a minimum the following Treasured Places should be given close consideration for protection:

Individual buildings: Green Lake Library, Fire Station #16, Twin Teepees Restaurant.

Thematic Nominations or protections: school buildings should be evaluated, Victorian residences, Bungalow-style residences

Olmsted landscapes: Green Lake Park, Ravenna Boulevard and Woodland Park.

## GENERAL DESCRIPTION

The Green Lake Community derives much more from Green Lake than its name alone. The lake is the physical heart of the community, dominating all other features; and also serves as the community's social center where local residents meet while strolling, jogging or cycling around the pathway, or at the community organizational and social functions held at the recreation center.

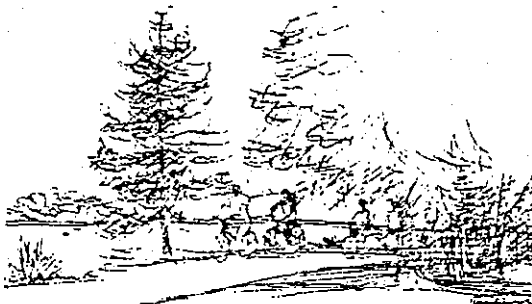
Moreover, the lake's unique qualities are important factors in attracting a diverse residential population, including younger families for the variety of recreational opportunities available, and the elderly for visual amenities as well as the stable social setting.



The area's bowl-like topography enhances the lake's unifying focal role by providing views of the water and by forming an imageable community-scaled topographic "room." The most identifiable physical boundaries are formed by Phinney Ridge to the west and the Central Freeway on the east. To the southwest, Lower Woodland Park provides a pleasantly forested green belt as well as numerous athletic fields and a miniature golf course. The land to the north rises more gradually from the lake so that the topographic enclosure is less pronounced.

Although the Freeway and Aurora Avenue North are intrusive upon the residential neighborhoods, producing noise and air pollution and separating some areas from the lake, they provide the community with excellent bus and auto access to downtown and other locations. Green Lake is connected to the University District by the Ravenna Boulevard bike path, making the area attractive to college students. East-West arterials include North 80th and North 85th Streets to the north, and North 50th Street to the south.

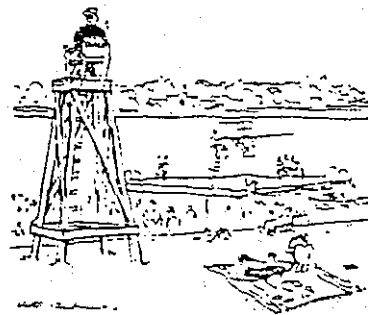
The residential areas surrounding the lake are quite similar in their housing types and in their environmental qualities. The houses are generally modest in size but vary widely in age and stylistic treatment. The residential streets are of ten well landscaped and many offer views of Green Lake and the mountains beyond.



There are several small commercial districts of widely differing character. The Green Lake shopping district is the most central to the community. Its pleasantly curving streets, and proximity

to the lake make it potentially one of the city's most physically attractive community shopping districts. Aurora Avenue to the North of 80th becomes northern Seattle's oldest and largest highway-scaled commercial strip. Phinney Avenue North and Greenwood Avenue North form a more modest neighborhood commercial strip serving the Phinney Ridge area with groceries, barbershops, drug stores, cafes, and other local services. In contrast with Aurora Avenue's bustling, brightly lit and garish character, the Phinney Ridge strip has a lower-keyed, well-worn appearance.

Just as the lake itself is the key element in the area's identity and environmental amenities, so is it an important factor in many of the community's problems and concerns. Not only is the lake heavily used on a day-to-day basis, but many special events such as motorboat racing, Fourth of July fireworks and water sports events are scheduled during the summer, drawing large crowds of spectators. Proper clean-up and maintenance as well as thoughtful scheduling of events in the park lands is therefore a major issue if Green Lake's attractiveness is to be preserved. A further problem is that the heavy use of the lake often causes congestion of local streets and parking lanes.



Close proximity to recreational open space and good access to downtown and the University make the Green Lake area attractive for apartment development. Consequently there have been many new apartments built recently to the north and east of the lake. While portions of the community are suitable for new apartments, it is important to insure that new developments do not interfere with important view corridors to the lake, nor intrude into the residential setting either visually or by causing parking and traffic congestion. Obviously, careful management of land-uses and zoning issues is in order.





The maintenance and upgrading of existing housing stock is another problem which the local community has addressed. Because of the widely varying ages of houses in the area, many of them require work if the housing stock is to remain solid. The influx of young families suggests that many of the smaller cottages and houses will be enlarged, or altered in order to meet the new requirements of today's life style. In response to this interest in remodeling and restoration, the Green Lake community has recently sponsored a series of home repair workshops which have been widely attended by people from all over the city as well as by local residents.

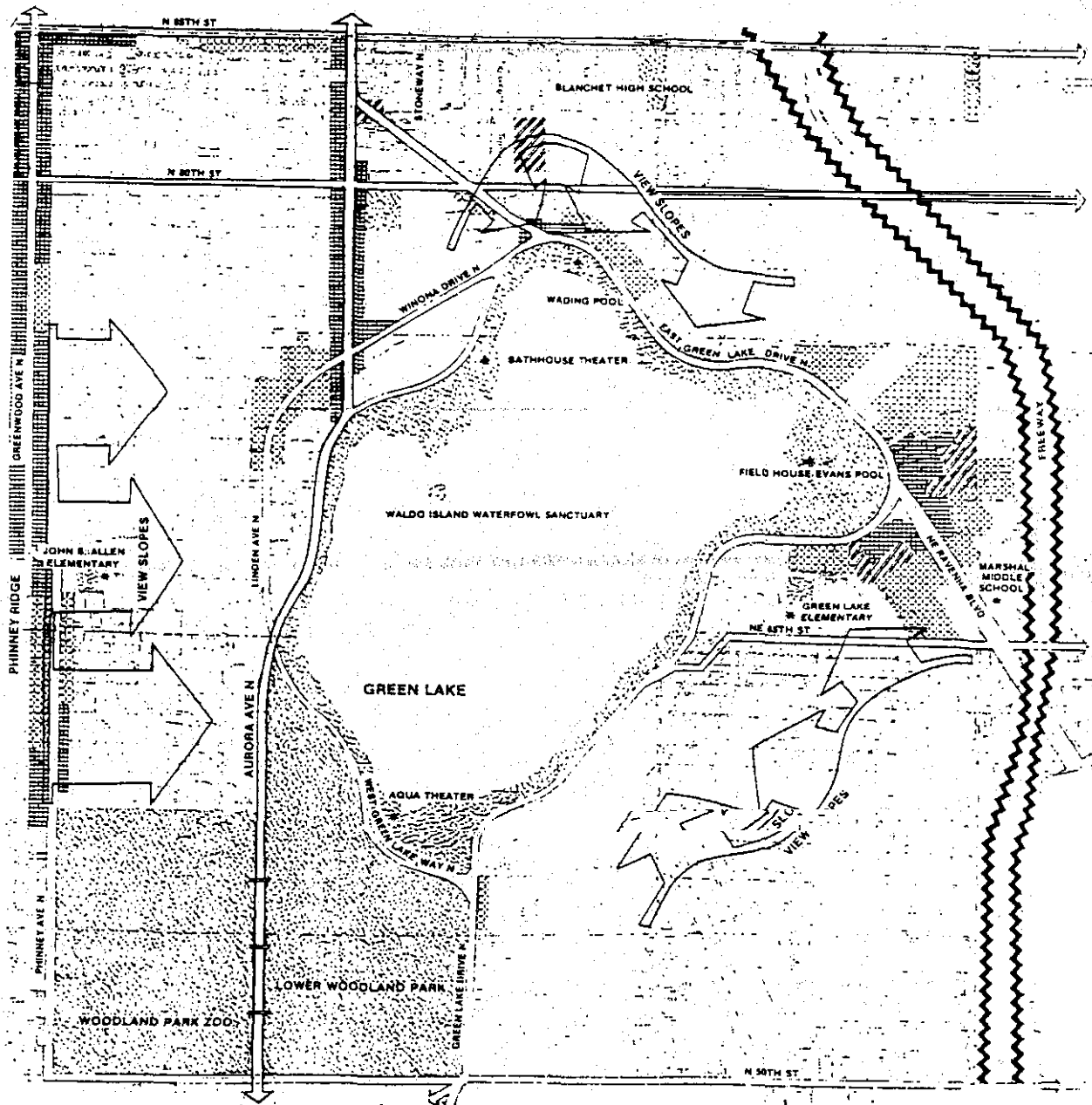
Thus, new problems as well as potential, are emerging with the lake's increasing popularity and the renewed interest in the area's pleasant residential neighborhoods. Realization of these potentials will depend upon the coordinated efforts of community residents, businesses, and the Seattle Parks Department.

# GREEN LAKE

## SUMMARY MAP SHOWING VISUAL STRUCTURE

### LEGEND

-  Predominantly Multi-Family Residential
-  Community Businesses
-  Parks/Open Space
-  Other Commercial Uses

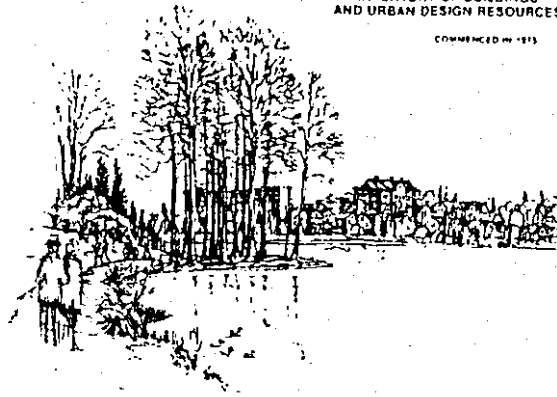




# GREEN LAKE

AN INVENTORY OF BUILDINGS  
AND URBAN DESIGN RESOURCES

COMMENCED IN 1975



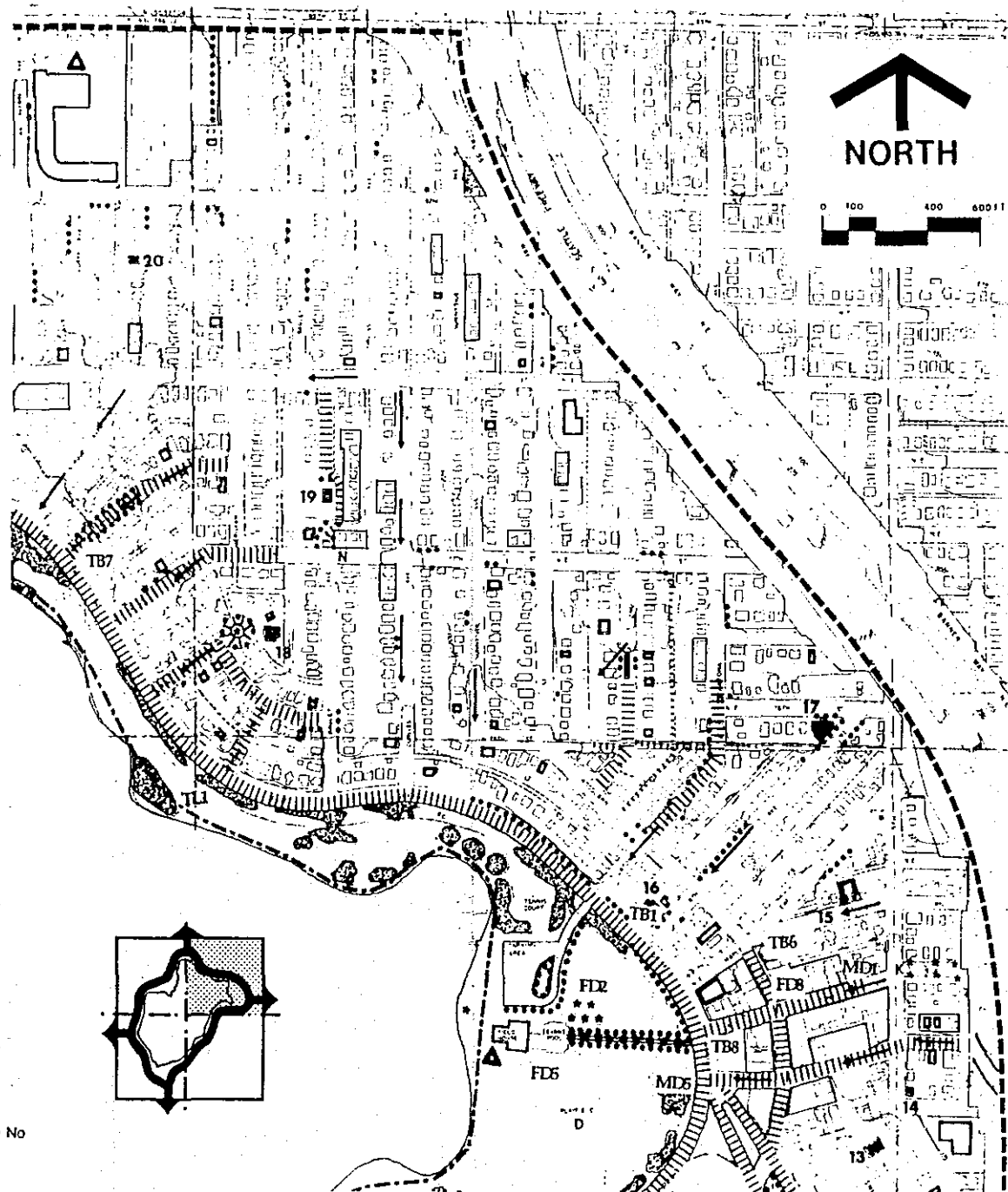
HISTORIC SEATTLE PRESERVATION AND DEVELOPMENT AUTHORITY

CONSULTANTS: FOLKE NYBERG  
VICTOR STEINBRUECK

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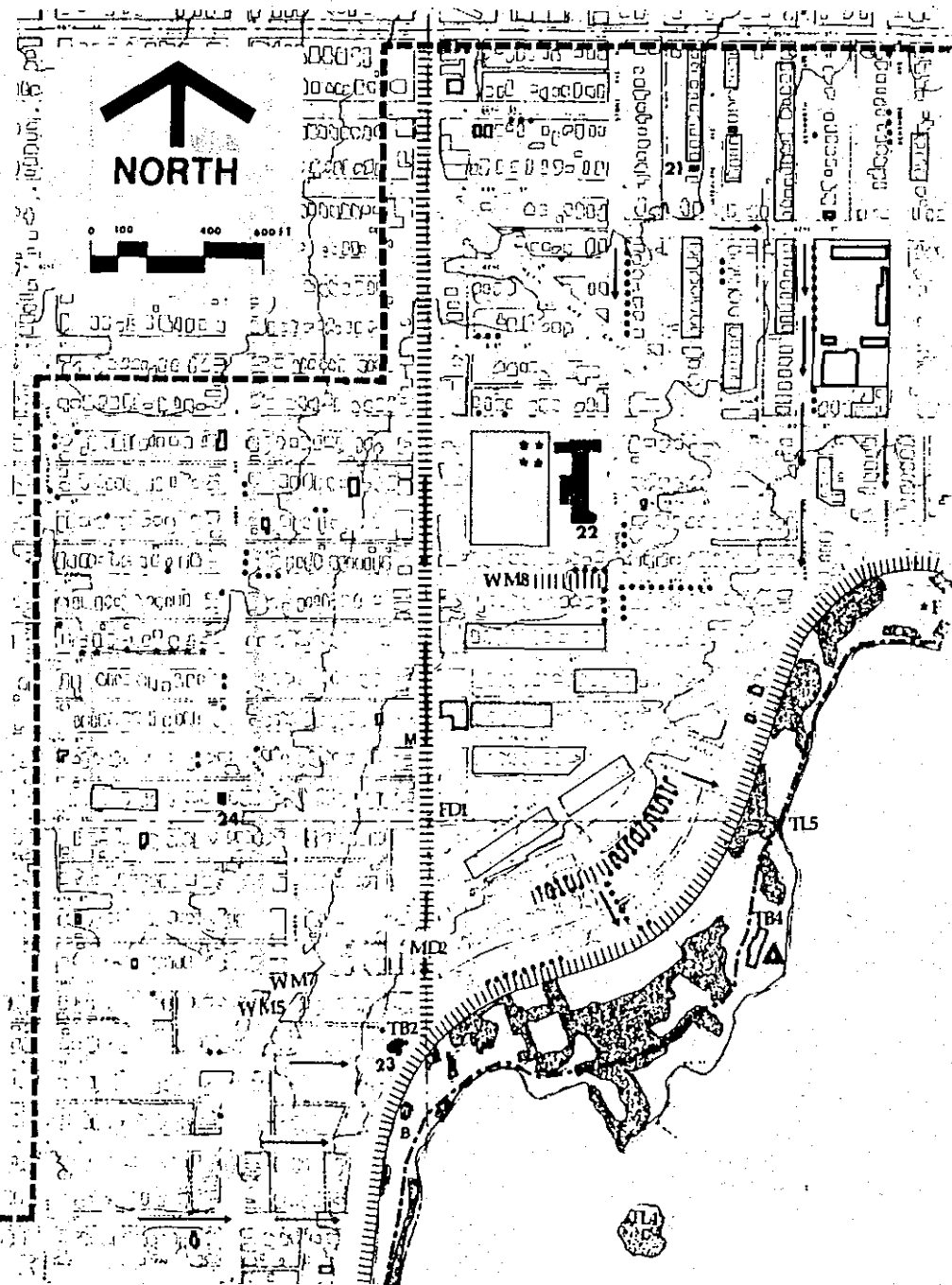
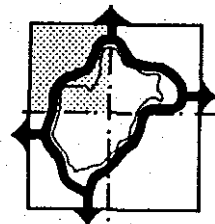
## LEGEND

- |   |                                 |
|---|---------------------------------|
| ■ Significant to the city—warrant further evaluation for designation as historic landmark     | □ Open Space                    |
| □ Significant to the community—special quality and character in relation to this neighborhood | ... Street Trees                |
| □ Building Group  | Streetscape                     |
| ▲ Landmark  | == Roadway Element              |
| ** Street Furniture   | ← View                          |
| * Civic Art   | --- Pathway/Bikeway             |
| 🌳 Landscaping/Vegetation  | --- Area Boundary               |
|   | 25 Building Reference Number    |
|   | N Urban Design Reference No.    |
|   | m Common Building Reference No. |



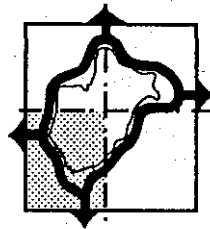
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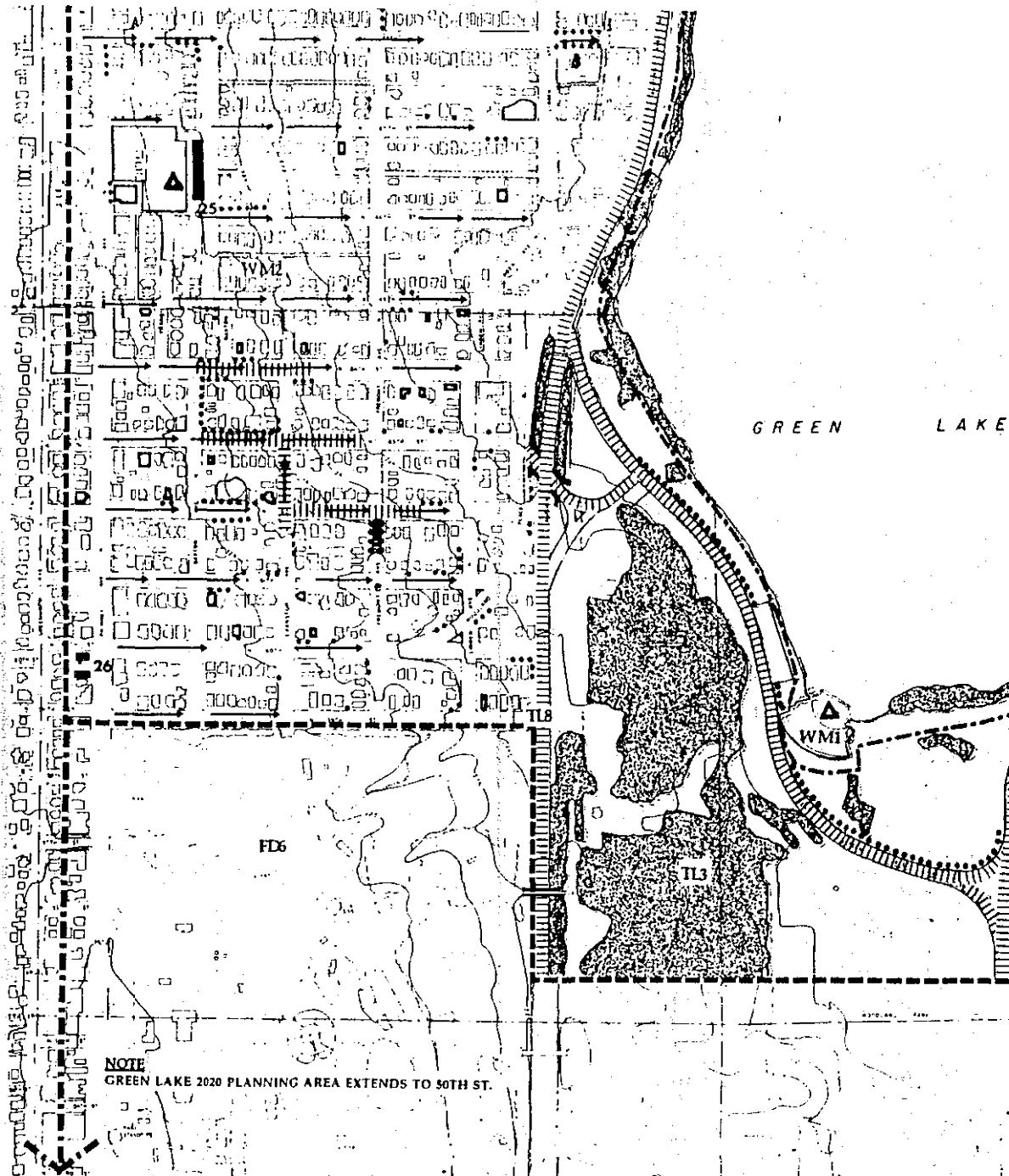


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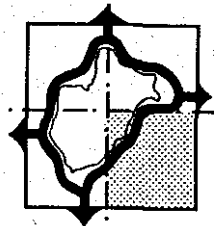


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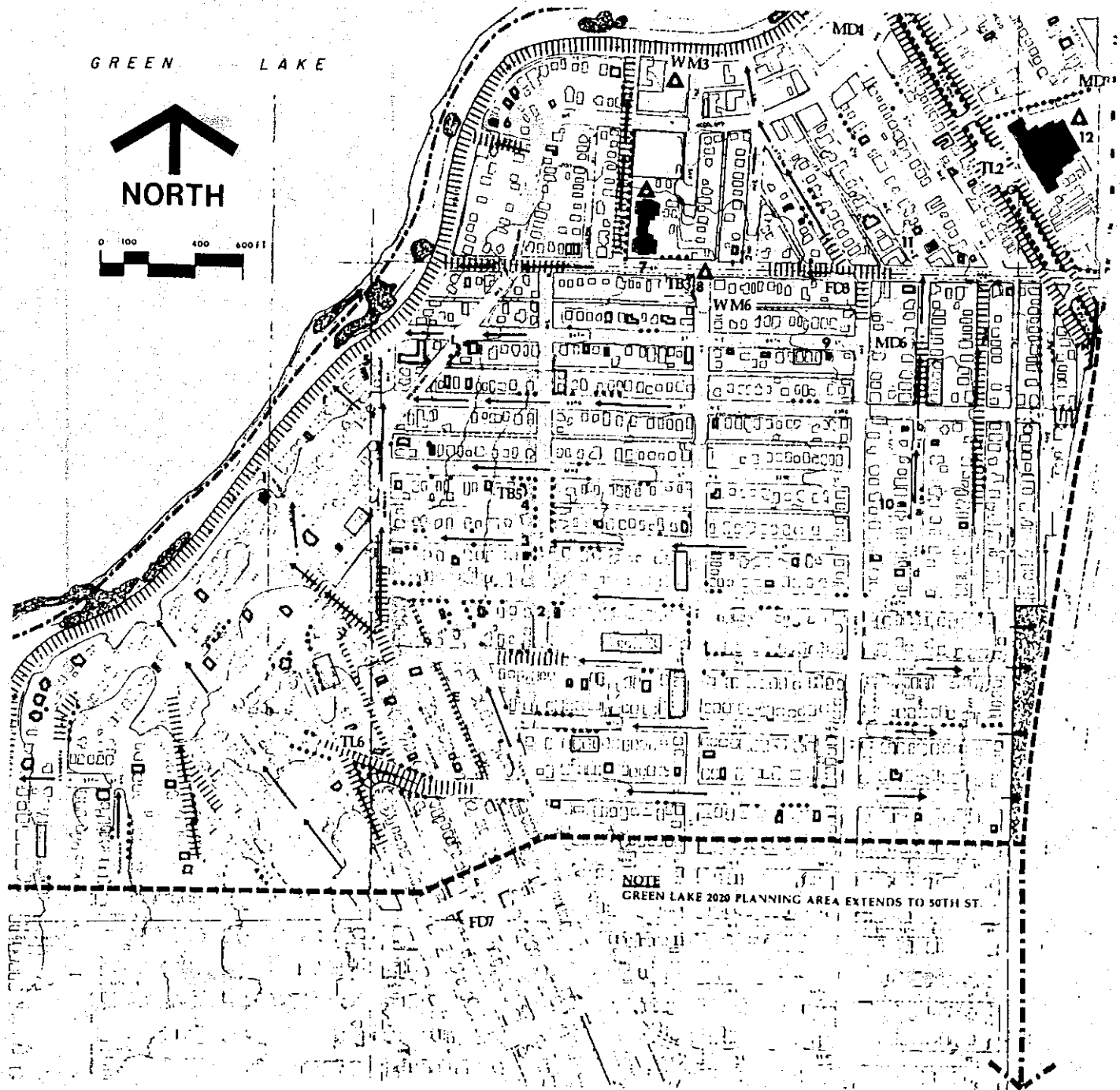


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GREEN LAKE



# URBAN DESIGN ELEMENTS

As mentioned in the General Description, the community's most important urban design feature is the lake itself and the parklands which surround it. Besides the sandy bathing beaches, Green Lake Park includes a bike and pathway, a wading pool, and an aqua-theatre. The community recreation center, playgrounds, and the Bathhouse Theatre. From dawn till dusk, there is a steady stream of walkers, joggers, cyclists circling the lake. Fishermen, women are a permanent year-round fixture along the shores as well as athletic teams practicing at sports. Summer time, of course, also finds picnickers, swimmers and boaters.

The park is pleasantly landscaped in the "Romantic" tradition brought to Seattle by the Olmsted Brothers. It is a "naturalistic" style of landscaping featuring unsymmetrical groupings of trees, grassy hill sides and gently undulating, natural-looking shoreline treatment intended to create a pastoral effect.

The park, however, is in a certain extent, in conflict with its passive landscaping. The fact that the pathway has become over-crowded and the vegetation near the shorelines is showing signs of deterioration.

Lower Woodland Park in the southwest of the lake offers additional play fields and tennis courts and also includes some secluded wooded areas which are among the most pleasant passive spaces in north-central Seattle. Bridges over Aurora link Lower Woodland to the Zoo.

Green Lake's residential areas are visually enhanced by view of the lake, street plantings and an unusually large number of rock walls. Irregular street patterns on the eastern side of the lake also add interest to the streetscapes and discourage through traffic.

Ravenna Boulevard linking Green Lake to the University district, Cowan and Ravenna Parks and the 17th Ave. Boulevard was part of the 1903 Olmsted Plan. Its route follows the old Ravenna Creek which drained Green Lake into Union Bay. The Olmsted Plan called for a lane on each side of the stream but when the level of Green Lake was lowered by 7 feet, the creek went dry and lake runoff was directed to a sewer. The Ravenna Creek Ravine was thus filled in allowing for a boulevard on the "New York Plan" a landscaped center strip between two separate traffic roadways. Construction started in 1912 and was completed in 1925.

Bicyclists had always kept an eye on the boulevard as a potential bikeway. By 1934 the requests for a bicycle route became organized and continued until 1973 when a bike lane was finally dedicated.



**A. VIEW** Views of the Lake are important in establishing the area's identity and sense of community.



**B. PATHWAY, BIKEWAY** The wide popularity of this heavily-trafficked path helps unify the community socially and physically.



**C. WALDO WATERFOWL SANCTUARY** The sanctuary was built by W.P.A. in 1935. It was officially established as a game reserve and named in honor of sportsman Waldo Darr.



**D. PLAYFIELDS** The many types of athletic sports that take place are themselves interesting and colorful attractions.



**E. ALLEYS** Many of the local alleys feature fine views of pleasant landscaping and make for interesting pedestrian paths.



**F. LOWER WOODLAND PARK** A quiet, wooded area which is often in contrast with the bustling heavily-used lake and playfields view.



**G. RAVENNA BOULEVARD** Part of the extensive Olmsted Plan to connect Seattle's parks with a series of scenic drives it is a good example of the "New York" type of boulevard.



**H. FREEWAY OVERPASS** The freeway overpass at Ravenna Boulevard disrupts the continuity of the landscaped open space as well as contributing to noise and air pollution of the immediate vicinity.



**I. COMMERCIAL STREET-SCAPE** The pleasant qualities of the business area could be enhanced by pedestrian scaled street furniture, tree planting and activity generating uses.



**J. RESIDENTIAL STREET-SCAPE** Pleasant residential landscaping, including awnings and views of the lake combine to produce a fine residential and pedestrian setting.



**K. LAMP POST** Examples of the early twentieth-century street lights add a touch of grace to streets north and east of the lake.



**L. ROCK WALL** Finely constructed rock walls are common, ranging from materials from cobblestones to massive granite boulders.



**M. AURORA STRIP** Brightly painted signs, acres of parking lots and plethora of architectural styles and gimmicks make Aurora Avenue North an important example of the American commercial strip.



**N. HOUSE GROUP** Rows of similarly-scaled and detailed Californian Style or Tudor-styled houses help give continuity and a sense of place to some streets.



**O. AURORA OVERPASS** The pleasantly designed pedestrian overpasses serve the vital function of connecting Lower Woodland Park and Green Lake with the city.

# COMMON BUILDING TYPES

Building development in Greenlake has occurred gradually and continuously over the past one hundred years. Consequently there are examples of house types from every decade since about 1880. Another historical factor which bears on the housing stock is that the people buying or building houses in the Green Lake area have always been predominantly of the middle-income groups. This has meant that while few large or elegant homes were built, the majority of houses have been generally well-maintained by relatively stable, family-oriented residential populations.

The area's oldest houses date from the 1880's and 1890's. The majority are located on the east of the lake since early development was encouraged there by the rail line and the saw mill. The most common house types built during this period were the pioneer farmhouse and the company cottage. The former type was common throughout the northern United States and familiar to early farmers, while the latter was usually built by non-farmer residents of modest means, i.e., call, millworkers' families. Reflecting more comfortable times, most of the houses of the 1890's were built in the Victorian style or were decorated with scrollwork brackets, ornamental gable tracery or a bay window.

The period from 1900 to World War I saw the rise of a new progressive spirit in the design of houses. The Victorian ornamentation was rejected in favor of simplified, rustic detailing and the informal character of the bungalow. The term "bungalow", stemming from the word "Bengia

originally referred to a one-and-a-half story cottage common in British India. The Indian house type, however, had little in common with the American variety. The American bungalow (or California bungalow) derived at least in part from the work of architects Greene and Greene, who built several prototypical examples in southern California. This new type of house rapidly became popular, and by 1910 they had become America's first coast-to-coast fad in house construction. Their popularity was due to the fact that their modest size (1 1/2 stories), open interior planning and straightforward construction responded to the need for an inexpensive, functionally efficient and stylistically innovative house type. The bungalow was one of the most progressive phenomena in American house design. Through the use of relatively open planning, large glass areas, porches and terraces, they were able to achieve a new integration of exterior and interior space.

Bungalows, Craftsman Style cottages, other twentieth-century forms can be found throughout the community, but they are especially common to the west of the lake, which is undergoing rapid real estate development coordinated with the establishment of Woodland Park during that period.

World War I brought an end to the popularity of the bungalow and Craftsman Style and ushered in a period of traditionalism and eclecticism. Colonial style houses, reflecting a post-war patriotism were

quite popular. The lure of sunny California and picturesque Europe was also evident in the number of California (or "Spanish") style and "Builder's Tudor" houses built at this time.

Agas in houses of this period are scattered throughout the community, are most common in the northwest of the lake where new S. builders during the 1920's could buy up several adjacent lots and develop them together.

The Great Depression severely curtailed the housing industry throughout the nation, and when house construction began again in the late 1930's house design emphasized economy. Residences were built to conform with minimum Federal Housing Authority standards in order to qualify for F. H. A. financing, which was the only source for small home loans. The result was that houses of this period feature compact, standardized plans, clipped eaves, small porches, low ceiling and roof lines, with very little stylistic embellishment. The majority of this house type are found in the northwest part of the community where vacant lots were still common.

The 1950's saw the rise to popularity of the California Ranch House Style. Associated with the western frontier sunny California, the new informal patio-oriented lifestyle, the Ranch House became the favorite of the post-war speculative builder... homebuyer.



**a PLAIN EARLY HOUSE**  
1870-1900 Straight-forward houses built by the area's early residents feature simple, basic forms and minimal ornamentation.



**b COMPANY COTTAGE**  
1889-1910 Standardized houses differing only in minor details were typically built for mill workers' families and are precursors of today's tract homes.



**c BUNGALOW 1905-1920** A popular, modest type showing California, Oriental, or Craftsman influences. Considered more architecturally progressive than elaborate eclectic homes.



**d COLONIAL STYLE HOUSE 1900-1940** Conservative traditionalism is expressed in these very popular homes of varying size, quality and age. Other house types may also feature decorative "colonial" details.



**e CALIFORNIA STYLE HOUSE c. 1918-1930** Expressive of the exotic qualities of the promised land of sunshine, movies and orange groves, these houses deserve maintenance of their original character.



**f BUILDERS' TUDOR COTTAGE c. 1918-1940** Steep pitched, multi-gabled and dormered roofs, and brick or stucco walls characterize these houses very common to the area.



**g DEPRESSION ERA HOUSE 1929-1950** Clipped eaves, minimal ornamentation, sunken garages, corner windows, and metallic linings are the distinguishing features of these small cottages.



**h BUILDERS' RANCH HOUSE 1950-1960** Immensely popular after World War II, ranch houses emphasized a horizontal profile and incorporated modern innovations with traditional stylistic motifs.



**i CONTEMPORARY APARTMENTS 1950-** The environmental success of new apartments depends upon their design sensitivity to surrounding buildings and streetscapes.

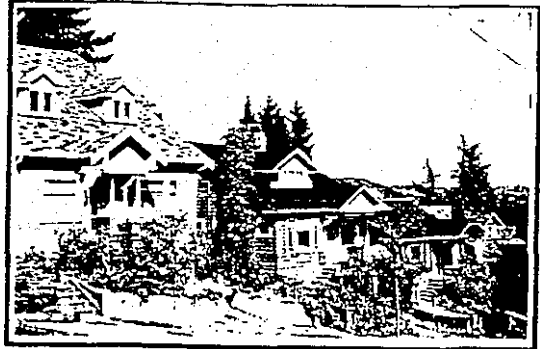


**j COMMERCIAL BUILDING 1910-** Well-built commercial buildings, often with living units above, are an important community resource and serve a variety of functions.

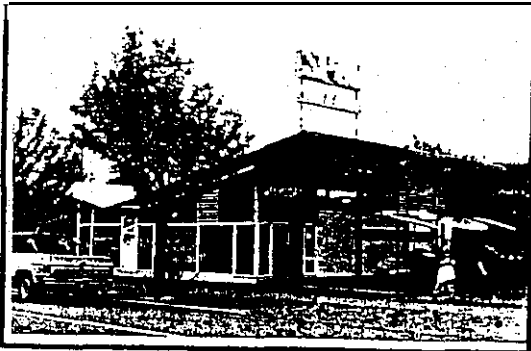
# WOULD BE MISSED



**WM-1 Aqua Theater**  
Green Lake Park, south shore



**WM-2 Bungalow blocks**  
N. 65th St. & Dayton Av. N.



**WM-3 Spuds Fish & Chips**  
6860 E. Green Lake Way N.



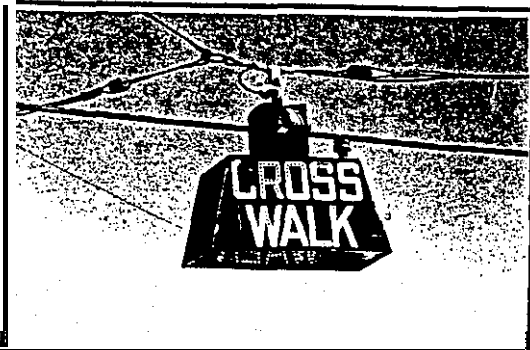
**WM-4 Bicycle paths**  
E. Green Lake Drive N



**W-5 Building in Linden-Winona District**  
Linden Av. N. & N. 73rd St.



**W M-6 Alleys**

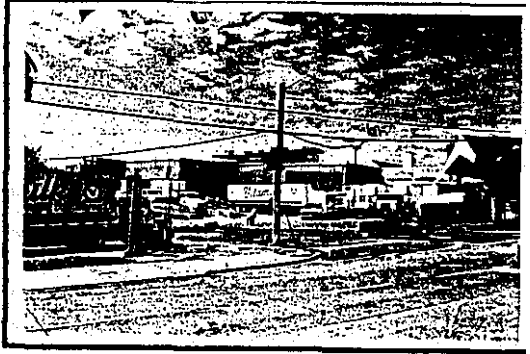


**WM-7 Old street signals & signs**



**WM-8 Tudor rows**  
N 78th St, between Aurora Ave. N & Stone Ave N

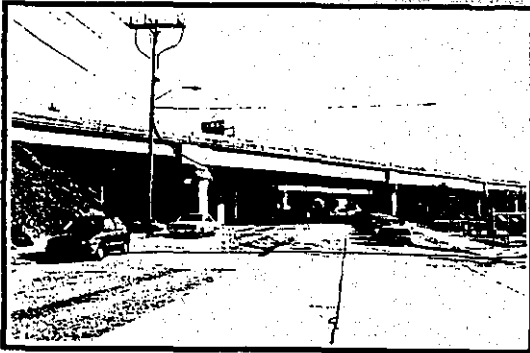
## MOST DISLIKED' PLACES



**MD-1 Vitamilk Dairy site**  
427 N.E. 72nd St.



**MD-2 Aurora Strip**  
Aurora Av. N. north of lake



**MD-3 I-5 Freeway overpasses**  
Weedin Pl. NE & NE 69th St.



**MD-4 Albertson's Store parking lot**  
6900 E. Green Lake Wy.



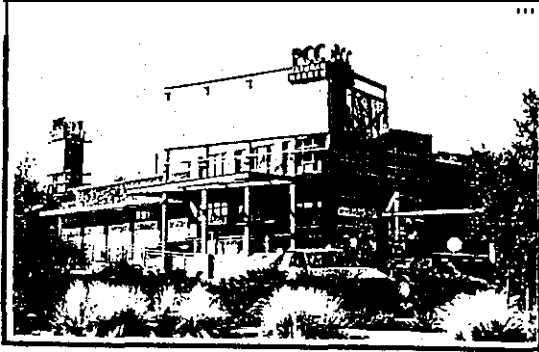
**MD-5 Five-way Intersection**  
NE Ravenna Blvd., NE 71st & E. Green Lake Dr. N



**MD-6 Recently-built Residences**  
Latona Av. N.E. & N.E. 64th St.



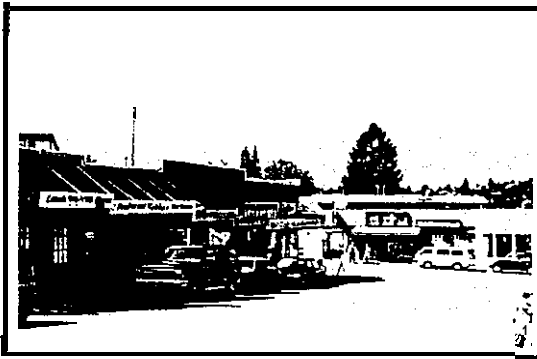
# FAVORITE DESTINATIONS



**FD-1 Puget Consumer% Coop (PCC)**  
Aurora Av. N. @ Winona Av. N.



**FD-2 Green Lake Community Center**  
7201 E. Green Lake Dr. ,?



**FD-3 Neighborhood Commercial District**  
NE 65th St. & Latona Ave., NE



**FD-4 Wading Pool**  
Green Lake Park, along south shore



**FD-5 Green Lake Park**  
Basketball court @ Community Center



**FD-6 Woodland Park Zoo**  
5500 Phinney Av. N.



**FD-7 "Tangletown" Commercial District**  
Meridian Av. N. & N. 56th St.



**FD-8 Green Lake Commercial District**  
Woodlawn Ave. NE & NE Maple Pl.

# TREASURED LANDSCAPES



**TL-1 Green Lake Park**  
View west from Gaines Pt., north shore



**TL-2 Ravenna Boulevard**  
View to northwest near Marshall School



**TL-3 Woodland Park**  
Picnic shelter.



**TL-4 Duck Island, Green Lake**  
Also "Waldo Waterfowl Sanctuary"



**TL-5 "Home for Wildlife"**  
Restoration area, north shore of lake



**TL-6 Public Green Space**  
N 57th St. & Keystone Pl. N

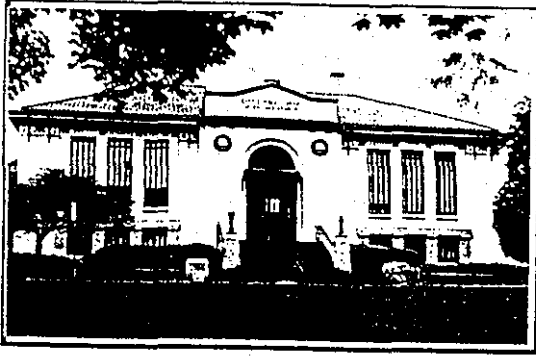


**TL-7 View of Green Lake**  
Looking west from N 63rd St. & Woodlawn Ave. N

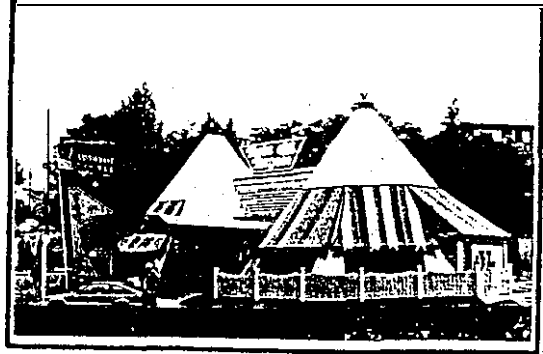


**TL-8 Aurora Avenue N at Woodland Park**  
View south with footbridges

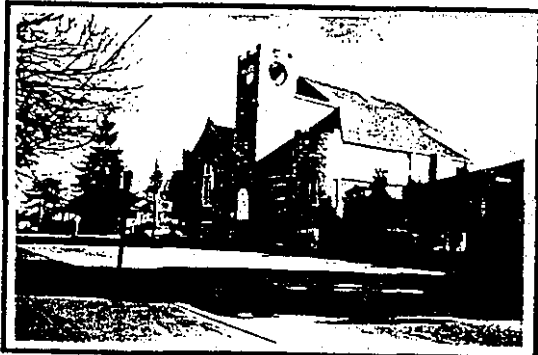
# TREASURED BUILDINGS



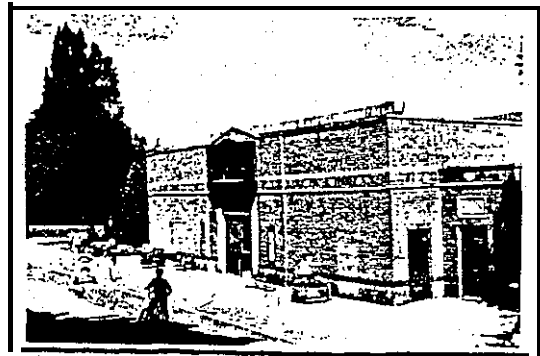
**TB-1 Green Lake Public Library**  
7364 E. Green Lake Dr. N.



**TB-2 Twin Teepees Restaurant**  
7201 Aurora Av. N.



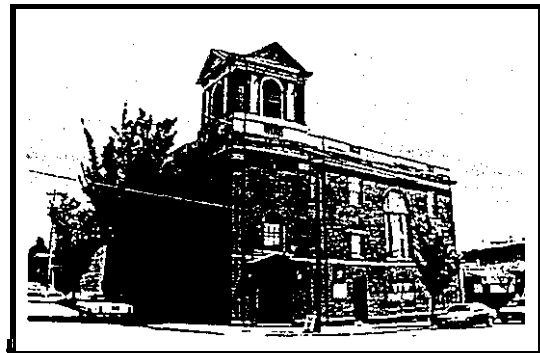
**TB-3 Green Lake United Methodist Church**  
6415 1st Av. N.E.



**TB-4 Bathhouse Theater**  
7312 W. Green Lake Dr. N.



**TB-5 Victorian Residence**  
2153 N 62nd St.



**TB-6 VFW Building**  
7220 Woodlawn Ave. N.E.



**TB-7 New Residential Construction**  
7726 E Green Lake Dr. N



**TB-8 Masonic Building**  
7210 E. Green Lake Dr. N.

# SIGNIFICANT BUILDINGS

Residence, 1909, 5858 East Green Lake Way N (M. Quale) A prominent "Classic Box" house.

2 Residence, 1906, 2303 N. 60th St. (T. Duffy). Finely detailed and immaculately maintained turn-of-the-century house.

3 Residence, c. 1890, 2159 N. 61st St. (J. Durringer) A fine example of a late nineteenth century house with Victorian ornamentation.

4 Residence, c. 1890, 2153 N. 62nd St. (J. Trumbull).

5 Hog" Residence, 1916, 3612 East Green Lake Way N, Remodeled, 1972 by Anker Molver.

6 McCallum House, 1948, 6602 East Green Lake Way N. (A. Polik) Engineer McCallum.

7 Green Lake Elementary School, 1902, N. 65th St and Sunnyside Ave N, Architect: Stephen.

8 Green Lake Methodist Church, 1903, N.E. 65th St and 1st Ave N.E.

9 Residence, c. 1895, 149 N. 64th St.

10 Residence, c. 1885, 6039 4th Ave N.E. This example of the "plain-early" style of house built by early settlers merits careful restoration.

11. Apartment, c. 1975 6310 4th Ave N.E. Architect P. Dermanis Its simple form and appropriate materials make this contemporary apartment building one of the more architecturally successful examples of its type

12. John Marshall Middle School, 1927, N.E. Ravenna Blvd and N.E. 68th St. Architect, F.A. Naramore. The orderly and imposing facade of this school building make it a dominant landmark along Ravenna Blvd

13. Fire Station No. 16 1928, 6846 Oswego Pl N.E. Architect: D. R. Huntington

14 Residence, c. 1885, 502 N.E. 70th

15 Apartment c. 1925 438 N.E. 73rd St

16. Green Lake Public Library, 1910, 7364 East Green Lake Drive N.

17. Eleventh Church of Christ, Scientist, 1941, 333 N.E. 76th St Architect Tennyson Bailamy. The church's design shows an interesting solution to a difficult site

18. Greenlake Christian School, 1916, 75140,, "Court.

19. Piccardo House, 1891, 2250 77th Ave N. (W.

Freeman) Part of a large estate, this fine turn-of-the-century house is still surrounded by a large, well-landscaped lot.

20 Residence c. 1900 3041 Stroud Ave N (G Lancaster). Well-maintained and composed turn-of-the-century house

21 Residence, c. 1885, 8215 Interlake Ave N. (H. Ingraham)

22 Daniel Bagley Elementary School, 1930, N. 80th Strand Stone Ave N Architect: F.A. Naramore. A pleasantly scaled modernist adaptation of the "English Collegiate" style

23 Twin Teepees Restaurant, 1934, 7201 Aurora Ave N. Bunzer, Holzmanreimer. This building was an early road house restaurant constructed of prefabricated concrete in California and trucked to the site

24 Residence : 1890, 730 N. 75th St. (T. Barton)

25 John B. Allen Elementary School, 1918, 6601 Dayton Ave N. Architect: Edgar Blair (Wooden building designed in 1904 by James Stephen.)

26 Chuck's Super Service, 1923, 5919 Phinney Ave N.

\* See captioned photographs below



21 RESIDENCE, c. 1885 A simple basic form with a gabled roof, stock materials and details and rudimentary scrollwork ornamentation make this an excellent example of a decorated pioneer type house.



4 RESIDENCE, c. 1890 A finely composed, large Victorian house. The circular veranda and the second floor sleeping porch show that period's emphasis on porch life.



9 RESIDENCE, c. 1890... interesting Victorian house which features a complex and improvised eclectic composition of forms, among them a turret... a unique corner oriel window



24 RESIDENCE, c. 1890 A well-maintained example of a "Victorian Classic Box" type 01, ..., featuring delicate ornamental details



8 GREEN LAKE METHODIST CHURCH, 1903 Rough masonry and irregular massing of geometric forms give this community landmark a Romanesque/Springle Style character



7 GREEN LAKE ELEMENTARY SCHOOL, 1902 Architect: James Stephen. An impressively-sited and well-designed example of an early, wooden Seattle school building, with some classical detailing.



16 GREEN LAKE PUBLIC LIBRARY, 1910 The architects, Somervell and Cote, executed a prominently sited library in the then popular Spanish colonial style.



18 GREEN LAKE CHRISTIAN SCHOOL, 1916 A unique example of a shingled Craftsman style school building complete with a bell tower.



2.5 JOHN B ALLEN ELEMENTARY SCHOOL, 1918 Architect: E. Blair A subtly proportioned and refined masonry school building



26 CHUCK'S SUPER SERVICE, 1923, The oldest Mobile station in the state. ... has been sympathetically maintained.



15 APARTMENT, c. 1925 This group of vaguely California-styled apartments surrounding a well-landscaped court is subtly composed and detailed.



13 FIRE STATION NO. 16, 1928 Architect: D.R. Huntington. This subtle and very unusual combination of Art Deco and eclectic Spanish Baroque styling illustrates the pluralistic design directions of the 1920's.



5 McCALLUM HOUSE, 1948 Built by engineer McCallum, this pleasantly sited and composed house appropriately incorporates reinforced concrete construction into the "International" architectural style



13 TWIN TEEPEES RESTAURANT, 1934 An important example of local Highway Architecture designed to attract attention through outrageous metaphors. Also serves as a symbolic gateway to Aurora's Commercial Strip



1 HOUGH HOUSE, 1916 A sensitive remodeling of an older house by architect Anker Molver which combines traditional materials and forms and new design ideas

## Appendix c

### Green Lake Chronology

years ago	
years ago	
1850's	First settlers arrive at Green Lake, named for the algae that give it its color. Silting of lake hastened by logging.
1904	Olmsted Brothers' Plan for City recommends lowering the Lake level to create more parkland.
1907 - 1910	City condemns/purchases private land to acquire lake shore.
	Lake levels lowered seven feet. Natural outlet of Lake (Ravenna Creek) cut off and filled to create Ravenna Blvd.
1912-1933	Dike is constructed in the lake. Lake is dredged and filled to add 100 acres to the beach/park.
1916	Water quality problems first recognized. Construction of streets/sewers eliminated many natural springs/creeks and created Lake stagnation problem.
1922	First water quality control measures: chlorine plant constructed at the north shore. Constructed a 36"-pipe to bring City water from the Green Lake and Maple Leaf Reservoirs (500,000 gals per day). Treated water with copper sulfate to kill the algae.
1925	Lake closed to swimming. Many ideas on how to improve water quality.
1926	Proposal to drain lake and turn it into a saltwater pond.
1930's	Masses of floating algae interfere with swimming and boating, gives off bad odor as it decays.
1932	Bond issue approved by voters, including "improvement of the lake."
1935	WPA project to dredge and purify the lake. Est. 1.5 million cubic yards of sediment dredged from east side of lake, pumped into the sewer, and discharged into Puget Sound. Portions of shoreline cleaned and graded. Overflow from city reservoirs and several springs diverted from sewer back into the lake.
1936	Proposal to create a 150-foot tall cascading fountain with sculptured dolphins and colored lights in the Lake.
1936-1937	UW chemical and biological studies. About 3,800 lbs. of copper sulfate were added to control algae. Duck Island constructed.
1941	Complaints about algae and chemicals used to control it.

1955	Densmore Storm Drain constructed north of Green Lake. Previously stormwater drained into the sanitary sewer under low flow and overflowed to Green Lake during heavy rainfall.
1957	Section of N. Trunk Sewer collapsed creating a crater in Ravenna Blvd; raw sewage backed up into the Lake and increased its depth by 7 inches.
1958	Beached closed all summer due to pollution.
1959	Underwater chlorination lines installed at West Green Lake beach.
1960	Dredging of 1.2 million gals of sediments, construction of 4 new inlets for city water and sewer outlets. Renewed attack on weeds and construction of seawalls to prevent erosion. Water lilies appear on freshened water.
1962 - 1965	City adds dilution water from drinking water reservoirs (2.8-5.9 million gals per day).
1967	UW study determined lake water quality had improved. Chlorination stopped (after 8 years).
1971	Algae returns
1973	Algae bloom temporarily closed one beach. National canoe and kayak championship contestants complain about weeds entangling equipment
1974	Complaints about swimmers' itch
1977	Drought/water shortages temporarily stop piping of drinking water into the lake. Late summer algae out-of-hand, beach closed.
1978	Eurasian Milfoil (invasive non-native plant) grows over 90% of lake, restricting lake use.
1981	Masses of decaying algae wash up on shore, stink, and create an obnoxious foam